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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/692,649	10/23/2003	Joachim Hossick-Schott	P-10579.00	8641

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EXAMINER
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HA, NGUYEN T

ART UNIT	PAPER NUMBER
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2831

DATE MAILED: 01/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/692,649	<b>Applicant(s)</b> HOSSICK-SCHOTT ET AL.	
	<b>Examiner</b> Nguyen T. Ha	<b>Art Unit</b> 2831	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 18 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-50 is/are pending in the application.
- 4a) Of the above claim(s) 1-14 and 28-44 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 15, 16 and 18 is/are rejected.
- 7) ☒ Claim(s) 17, 19-27 and 45-50 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                                                                           |                                                                                         |
|-------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                                               | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                                      | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>0504</u> . | 6) <input type="checkbox"/> Other: _____                                                |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election of claims 15-27 and 45-50 in the reply filed on 12/18/2005 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 15-16 and 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Akami et al. (US 6,375,688).

Regarding claim 15, Akami et al. disclose a capacitor apparatus (figures 1-4) comprising:

- a porous sintered valve metal anode member (31) having at least two cavities (32) formed therein;
- a conductive lead wire (20) coupled to the anode member;
- at least one cathode member (33) disposed in electrical communication with the anode member; and

- a housing means (37) for retaining the anode member and cathode member.

Regarding claim 16, Akami et al. disclose the anode member includes one of an aluminum material (column 7, line 49).

Regarding claim 18, Akami et al. disclose the at least two cavities comprises at least one surface feature on the anode member and the at least one surface feature comprises a ridge (figure 4).

***Allowable Subject Matter***

4. Claims 17, 19-27 and 45-50 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

With respect to claim 17, the prior art alone or in combination does not teach the limitation of the cathode member includes one of: a carbon material, stainless steel material, a carbide material, a titanium material and a ruthenium material, and the cathode member includes a coat of at least one of a carbon layer, a carbide material, a carbonaceous material, a ruthenium oxide, an iron oxide, a nickel oxide, a titanium oxide, a ruthenium carbide, an iron carbide, and a nickel carbide.

With respect to claims 19-20, the prior art alone or in combination does not teach the limitation of a capacitor having the cathode member comprises an elongated cathode member and the elongated cathode member is at least partially inserted into one of the at least two cavities, and wherein the cathode member has a core

surrounded by a high capacitance material and a separator layer surrounding the high capacitance material.

With respect to claims 21-27, the prior art alone or in combination does not teach the limitation of the anode member and the cathode member each have major surfaces and the major surface of the anode member is disposed substantially orthogonal to the major surface of the cathode member.

With respect to claims 45-50, the prior art alone or in combination does not teach the limitation of a capacitor having the valve metal anode includes a cross-sectional density gradient and a peripheral portion of the valve metal anode is relatively less dense than a central portion of the valve metal anode.

#### **Citation Relevant of Prior Art**

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Evans et al. (US 6,576,524) disclose method of making a prismatic capacitor.

b. Nitta et al. (US 6,519,137) disclose solid electrolytic capacitor and production method thereof.

c. Otowa et al. (US 6,413,409) disclose flow-through capacitor and method of treating liquids with it.

#### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nguyen T. Ha whose telephone number is 571-272-

1974. The examiner can normally be reached on Monday-Friday from 8:30AM to 6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on 571-272-2800 ext. 31. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Nguyen T. Ha', with a stylized, flowing script.

**Nguyen T. Ha**  
**January 17, 2006**